

## PATENT ABSTRACTS OF JAPAN

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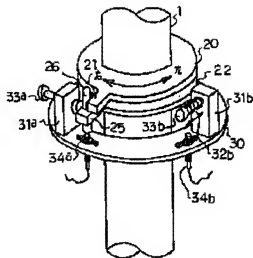
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## (54) PIVOT STOPPER

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide a pivot stopper capable of stopping a pivot surely at a turning limit and also changing a critical angle easily, thereby making it stoppable at the optional critical angle.

SOLUTION: A pivot 1 is provided with a swivel flange 20 in which a claw 21 is installed. A sliding ring 22 made up of being separately turnable from the pivot 1 is installed in a spot adjacent to the swivel flange 20. This sliding ring 22 is provided with a ring claw 25 and a pin 26 jointly. An anchor block 30 is installed at the outside of the pivot 1, and likewise two stopper blocks consisting of a right turning side stopper 31a and a left turning side stopper 31b are installed in this anchor block 30.



## LEGAL STATUS

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## \* NOTICES \*

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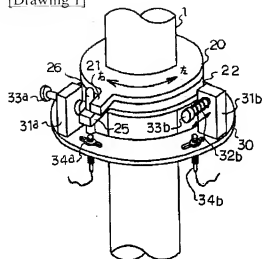
1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.\*\*\* shows the word which can not be translated.

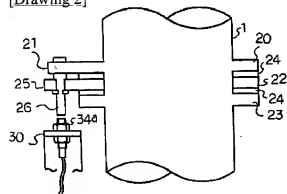
3.In the drawings, any words are not translated.

## DRAWINGS

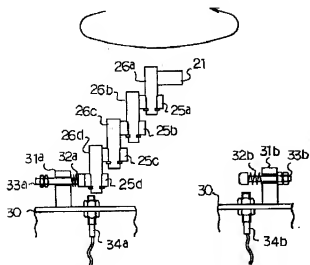
[Drawing 1]



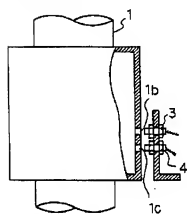
[Drawing 2]



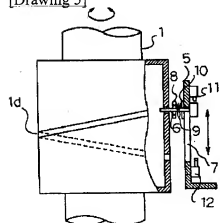
[Drawing 3]



[Drawing 4]



[Drawing 5]



[Translation done.]

[0019] As shown in drawing 1 and drawing 2, the revolution flange 20 which was united with the fixed pivot 1 is formed in the fixed pivot 1, and the pawl 21 as a stop member formed so that it might project in the direction of a periphery is formed in this revolution flange 20.

[0020] Moreover, the above-mentioned revolution flange 20 is adjoined and the sliding ring 22 as a rotation member constituted independently possible [ a fixed pivot 1 ] for revolution is formed in the fixed pivot 1. In this example, as shown in drawing 2, the revolution flange 20 and spacing are prepared, the flange 23 is formed (to method of drawing Nakashita), and the sliding ring 22 is stopped free [ revolution ] through engine-guide gold 24 among these revolution flanges 20 and flanges 23.

[0021] The pin 26 arranged so that the ring pawl 25 formed so that it might project in the direction of a periphery like the revolution flange 20, and this ring pawl 25 may be penetrated is formed in the above-mentioned sliding ring 22, and the stop member by the side of the sliding ring 22 is constituted by these ring pawls 25 and pins 26.

[0022] Moreover, the standing ways 30 formed so that the surroundings of a fixed pivot 1 might be surrounded are established in the exterior of a fixed pivot 1, and clockwise rotation side stopper base 31a and two stopper bases of anticlockwise rotation side stopper base 31b are established in these standing ways 30. It is energized with Springs 32a and 32b, and the stopper bolts 33a and 33b whose migration was enabled are formed in the drawing Nakaya mark direction, respectively, and \*\*\*\*\* limit switch 34a and \*\*\*\*\* limit switch 34b are prepared in such clockwise rotation side stopper base 31a and anticlockwise rotation side stopper base 31b, respectively so that it may be located under these stopper bolts 33a and 33b. By this example, such \*\*\*\*\* limit switch 34a and \*\*\*\*\* limit switch 34b consist of a proximity sensor, and switching of them is carried out in this side which the ring pawl 25 presses the stopper bolts 33a and 33b at the time of clockwise rotation and anticlockwise rotation, and hits clockwise rotation side stopper base 31a and anticlockwise rotation side stopper base 31b, and they are arranged so that rotation of a fixed pivot 1 may be suspended.